

AMENDMENTS TO THE CLAIMS

1. (Currently Amended): A system for receiving audio input comprising:

a display for displaying electronic information, wherein the electronic information includes a plurality of documents;

an audio input receiving audio annotations in the form of audio clips;

a processor for associating said received audio annotations with said displayed electronic information, wherein said processor further associates an author of each of said audio annotations with each of said respective audio annotations, each of said audio annotations being randomly accessible based on the author;

a storage for storing the audio clips, wherein the storage of the audio clips includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating the location in the electronic information at which the author inserted each audio clip and time data indicating the time of recording of each audio clip during a session so that one audio clip is displayed in synchronism with another audio clip; and

a navigation history feature for recording all document navigations indexed by time so that both the audio clip recorded during the session and a sequence of document navigations can be played back simultaneously;

wherein said audio input receives verbally delimited keywords and converts said verbally delimited keywords into search queries, and

wherein the processor allows dynamically accessing the audio clips based on the search queries.

2. (Canceled)

3. (Canceled)

4. (Previously Presented): The system according to claim 1, wherein the storage stores each of said audio annotations with the associated author.

5. (Previously Presented): The system according to claim 1, further comprising:
an input receiving a user's input,
wherein said processor starts recording an audio annotation from said audio input in response to said user's input.

6. (Previously Presented): The system according to claim 1, wherein said processor includes a voice activated recording system for recording said audio annotation.

7. (Previously Presented): The system according to claim 6, wherein said voice activated recording system records when said audio annotation exceeds a predetermined threshold.

8. (Previously Presented): The system according to claim 6, wherein said voice activated recording system records when a known user's voice is detected in said audio annotation.

9. (Previously Presented): The system according to claim 1, wherein said processor controls said display to indicate that an audio annotation is associated with said displayed electronic information.

10. (Currently Amended): A system for playing audio content, said system comprising:
a display for displaying electronic information, wherein the electronic information includes a plurality of documents;
a storage for storing audio annotations in the form of audio clips, each of said audio annotations including an author of said audio annotation and being associated with said displayed electronic information, each of said audio annotations being randomly addressable based on the author; wherein said storage includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating the location in the electronic information at which the author inserted each audio clip and time data indicating the time of recording of each audio clip during a session so that one audio clip is displayed in synchronism with another audio clip; and

a navigation history feature for recording all document navigations indexed by time so that the system can simultaneously play back, not only the audio clip recorded during the session, but also a sequence of document navigations;

an audio input for receiving verbally delimited keywords and converting said verbally delimited keywords into search queries;

an output for outputting at least some of said audio annotations responsive to navigation of said displayed electronic information; and

a processor for controlling said display, said storage and said output,

wherein the processor allows dynamically accessing the audio clips based on the search queries.

11. (Canceled)

12. (Canceled)

13. (Previously Presented): The system according to claim 10, wherein said storage is a database.

14. (Previously Presented): The system according to claim 10, further comprising:

an input for receiving a user's input,

wherein said output outputs at least some of said audio annotations in response to receiving said user's input.

15. (Previously Presented): The system according to claim 10, further comprising:

an input for receiving a user's input of an author,

wherein said processor searches authors of said stored audio annotations in response to said user's input.

16. (Original): The system according to claim 15, wherein the output of said processor is sent to said display to display an indication of the search results.

17. (Previously Presented): The system according to claim 15, wherein the output of said controller is sent to the output for playing an audio annotation with an author matching the search results.

18. (Previously Presented): The system according to claim 10, wherein said processor retrieves all audio annotations associated with said electronic information when said electronic information is accessed.

19. (Previously Presented): The system according to claim 10, wherein said processor outputs selected audio annotations to be played through said output when a page of said electronic information is displayed.

20. (Previously Presented): The system according to claim 19, wherein said processor automatically plays said selected audio annotations when said page is displayed.

21. (Previously Presented): The system according to claim 10, further comprising: a communication link to transmit said audio annotations.

22. (Previously Presented): The system according to claim 21, further comprising: a network connected to said communication link for receiving said audio annotations, said network being accessible by other users.

23. (Previously Presented): The system according to claim 21, further comprising: a receiving device of another user for receiving said audio annotations, said receiving device receiving said audio annotations through one of a wired or wireless interface.

24. (Previously Presented): The system according to claim 22, wherein said network further processes said audio annotations.

25. (Previously Presented): The system according to claim 22, wherein said network includes a database for storing said audio annotations.

26. (Previously Presented): The system according to claim 22, wherein said network receives audio annotations without receiving said electronic information associated with said audio annotations.

27. (Currently Amended): A user interface for displaying electronic information to a user, the electronic information including a plurality of documents, the user interface comprising:

a first display portion for displaying a portion of a document; and

a second display portion for displaying a graphical indication that said document includes an audio annotation associated with said displayed portion of said document,

wherein said audio annotation is in the form of audio clips and wherein the audio annotation is associated with an author of said audio annotation, said audio clips are stored in a storage which includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating the location in the electronic information at which the author inserted each audio clip and time data indicating the time of recording of each audio clip during a session so that one audio clip is displayed in synchronism with another audio clip;

a navigation history feature for recording all document navigations indexed by time so that the system can simultaneously play back, not only the audio clip recorded during the session, but also a sequence of document navigations;

an audio input for receiving verbally delimited keywords and converting said verbally delimited keywords into search queries;

wherein the user interface is controlled by a processor which allows dynamically accessing the audio clips based on the search queries.

28. (Original): The user interface according to claim 27, further comprising:
a third display portion for displaying a non-audio annotation.

29. (Original): The user interface according to claim 27, further comprising:
a third display portion for displaying an indication that said audio annotation is being
recorded or played back.

30. (Original): The user interface according to claim 27, further comprising:
a third display portion for displaying one of a document tape or a master tape.

31. (Original): The user interface according to claim 27, further comprising:
a third display portion for receiving a user input of a property or properties of said audio
annotation.

32. (Original): The user interface according to claim 27, wherein said audio annotation is
recordable by said user.

33. (Currently Amended): A process for recording an audio annotation comprising the
steps of:

displaying electronic information, wherein the electronic information includes a plurality
of documents;

receiving a user input;

recording an audio annotation in the form of audio clips in response to said user input;

associating an author of the audio annotation with the audio annotation;

storing said audio clips in a storage which includes properties that permit audio
information to be associated with a visual wherein the properties include position data indicating
the location in the electronic information at which the author inserted each audio clip and time
data indicating the time of recording of each audio clip during a session so that one audio clip is
displayed in synchronism with another audio clip; and

recording all document navigations indexed by time so that both the audio clip recorded during the session and a sequence of document navigations can be played back simultaneously;
associating said audio annotation with properties including a displayed portion of said electronic information;
receiving verbally delimited keywords and converting said verbally delimited keywords into search queries;
dynamically accessing the audio clips based on the search queries.

34. (Original): The process according to claim 33, further comprising the step of:
storing said audio annotation prior to the association of said audio annotation with said displayed portion.

35. (Original): The process according to claim 33, further comprising the step of:
storing said audio annotation after the association of said audio annotation with said displayed portion.

36. (Original): The process according to claim 33, wherein said recording step records all ambient sounds.

37. (Original): The process according to claim 33, wherein said recording step records only sounds above a predetermined threshold.

38. (Original): The process according to claim 37, wherein said recording step records only a specific user's voice.

39. (Original): The process according to claim 33, further comprising the step of:
associating additional properties with said audio annotation at the start of recording of said audio annotation.

40. (Original): The process according to claim 33, wherein one of said properties is a file position or document position of an item on said displayed portion of said electronic information.

41. (Original): The process according to claim 33, wherein one of said properties is a start identification of said displayed portion of said electronic information.

42. (Canceled)

43. (Currently Amended): A process for playing audio annotations comprising the steps of:

displaying a portion of electronic information, wherein the electronic information includes a plurality of documents;

receiving a user input;

retrieving audio annotations in the form of audio clips from a storage which includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating the location in the electronic information at which the author inserted each audio clip and time data indicating the time of recording of each audio clip during a session so that one audio clip is displayed in synchronism with another audio clip, each of said audio annotations being associated with an author of said audio annotation;

recording all document navigations indexed by time so that both the audio clip recorded during the session and a sequence of document navigations can be played back simultaneously;

receiving verbally delimited keywords and converting said verbally delimited keywords into search queries;

wherein said retrieving includes dynamically accessing the audio clips based on the search queries;

assembling said audio clips into an audio stream; and

playing said audio stream.

44. (Original): The process according to claim 43, further comprising the step of:
waiting for a second user input prior to playing said audio stream.

45. (Previously Presented): The process according to claim 43, further comprising the step of:

playing said audio stream once said audio stream is assembled.

46. (Original): The process according to claim 43, wherein said user input is a text query.

47. (Original): The process according to claim 43, wherein said user input is a voice query.

48. (Original): The process according to claim 43, further comprising the steps of:
altering the display of said portion to match a currently playing annotation in said audio stream.

49. (Previously Presented): The process according to claim 48, wherein said altering step includes the steps of:

comparing the length of said currently playing annotation with starting identifications of displayable portions of said electronic information; and

displaying the portion of said electronic information supporting the greater length of said currently playing annotation.

50. (Currently Amended): A process for playing audio annotations comprising the steps of:

navigating to a page;

retrieving at least one audio annotation associated with a page or associated with an item on a page in the form of audio clips from a storage which includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating

the location in the page at which the author inserted each audio clip and time data indicating the time of recording of each audio clip during a session so that one audio clip is displayed in synchronism with another audio clip;

recording all page navigations indexed by time so that both the audio clip recorded during the session and a sequence of page navigations can be played back simultaneously;

receiving verbally delimited keywords and converting said verbally delimited keywords into search queries;

wherein said retrieving includes dynamically accessing the audio clips based on the search queries; and

playing said at least one audio annotation,

wherein said at least one audio annotation is associated with a property identifying an author of said at least one audio annotation.

51. (Original): The process according to claim 50, further comprising the step of: waiting for a user input prior to playing said audio annotation.

52. (Original): The process according to claim 50, wherein said item on said page includes at least one of embedded notes, inked notes, highlights and underlining.

53. (Original): The process according to claim 50, wherein said at least one audio annotation was previously retrieved and said retrieving step includes indexing said previously retrieved at least one audio annotation.

54. (Original): The process according to claim 50, wherein said at least one audio annotation is the result of a newly executed query.

55. (Currently Amended): A computer readable medium having a data structure stored thereon, said data structure comprising:

a document;

a link object; and

audio content with at least one property,

wherein said link object references said document and references said audio content,

wherein said audio content includes at least one audio annotation in the form of audio clips, wherein the audio clips are stored in a storage which includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating the location in the document at which the author inserted each audio clip and time data indicating the time of recording of each audio clip during a session so that one audio clip is displayed in synchronism with another audio clip;

information for recording all document navigations indexed by time so that both the audio clip recorded during the session and a sequence of document navigations can be played back simultaneously;

information for receiving verbally delimited keywords;

information for converting said verbally delimited keywords into search queries; and

information for dynamically accessing the audio clips based on the search queries;

wherein at least one property identifies an author of the at least one audio annotation.

56. (Previously Presented): The data structure according to claim 55, wherein at least one property relates to the time said audio content started recording.

57. (Previously Presented): The data structure according to claim 55, wherein at least one property relates to the time said audio content stopped recording.

58. (Previously Presented): The data structure according to claim 55, wherein at least one property relates to the length of recording of said audio content.

59. (Canceled)

60. (Previously Presented): The data structure according to claim 55, wherein at least one property relates to a start ID.

61. (Previously Presented): The data structure according to claim 55, wherein at least one property relates to a stop ID.

62. (Canceled)

63. (Previously Presented): The data structure according to claim 55, wherein said audio clips are stored in a database.

64. (Previously Presented): The data structure according to claim 55, wherein at least one property is one of a plurality of properties and said properties are in a marked up language form.

65. (Original): The data structure according to claim 64, wherein said properties are in XML.

66. (Original): The data structure according to claim 55, wherein said audio content is stored within a document.

67. (Original): The data structure according to claim 55, wherein said audio content is stored apart from a document.

68. (Previously Presented): The data structure according to claim 67, wherein said audio content is stored in a database with at least one property designating a position of a viewed document relating to said audio content.

69. (Previously Presented): The data structure according to claim 67, wherein said audio content is stored in a database and linked to a separate annotation document that stores a position of a viewed document relating to said audio content.

70. (Currently Amended): A process for recording audio content comprising the steps of:
navigating to a page of a document;
recording said audio content; and
associating properties with said audio content such that retrieval of said audio content positions said audio content after previously recorded audio content,
wherein said audio content includes at least one audio annotation in the form of audio clips,

storing said audio clips in a storage which includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating the location in the page at which an author inserted each audio clip and time data indicating the time of recording of each audio clip during a session so that one audio clip is displayed in synchronism with another audio clip; and

recording all page navigations indexed by time so that both the audio clip recorded during the session and a sequence of page navigations can be played back simultaneously;

receiving verbally delimited keywords and converting said verbally delimited keywords into search queries;

dynamically accessing the audio clips based on the search queries;

wherein at least one property identifies an the author of the at least one audio annotation.

71. (Cancelled)

72. (Currently Amended): The process according to claim 71, wherein said audio content and said previously recorded audio content is ordered at least by said time propertydata.

73. (Currently Amended): A process of searching audio clips inserted into an electronic information, the electronic information comprising a plurality of documents, wherein each of said audio clips includes an audio annotation associated with an author of the audio annotation, the process comprising the steps of:

inputting search terms or properties;

searching said audio clips for said search terms or properties from a storage which includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating the location in the electronic information at which the author inserted each audio annotation and time data indicating the time of recording of each audio annotation during a session so that one audio clip is displayed in synchronism with another audio clip; and

recording all document navigations indexed by time so that both the audio annotation recorded during the session and a sequence of document navigations can be played back simultaneously;

ordering audio clips detected by said searching step for output;

receiving verbally delimited keywords;

converting said verbally delimited keywords into search queries,

dynamically accessing the audio clips based on the search queries;

wherein each of said audio clips includes an audio annotation associated with an author of the audio annotation,

wherein said search terms or properties identify an the author of the audio annotation.

74. (Canceled)

75. (Currently Amended): A process for recording audio information comprising the steps of:

recording audio signals as a first file;

processing said file to extract audio clips inserted into an electronic information, the electronic information comprising a plurality of documents, wherein each of said audio clips includes an audio annotation associated with an author of the audio annotation; and

storing said audio clips in a storage which includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating the location in the electronic information at which the author inserted each audio annotation and time data indicating the time of recording of each audio annotation during a session so that one audio clip is displayed in synchronism with another audio clip,

recording all document navigations indexed by time so that both the audio annotation recorded during the session and a sequence of document navigations can be played back simultaneously;

receiving verbally delimited keywords;

converting said verbally delimited keywords into search terms or properties;

dynamically accessing the audio clips based on the search queries;

wherein said processing separates the content of said first file into audio clips based on events,

wherein each of said audio clips includes an audio annotation associated with an author of the audio annotation,

wherein said processing associates an author of the recorded audio signal with the audio annotation.

76. (Original): The process for recording according to claim 75,

wherein said audio signals include speech, and

wherein said events comprise at least one of short pauses in said speech, a pause of a predetermined length, and a user navigating away from a displayed page.

77. (Currently Amended): A process for associating audio notes and handwritten notes comprising the steps of:

creating a handwritten note;

associating a time at which said handwritten note was created with said handwritten note; creating an audio note;

associating a time at which said audio note was created with said audio note; and

associating an author of said audio note with said audio note, wherein said audio notes are comprised of audio clips inserted into an electronic information, the electronic information comprising a plurality of documents,

wherein, upon selection of said handwritten note, audio notes created at or near the time at which said handwritten note was created are located with said handwritten note,

wherein locating said audio notes includes the steps of:

receiving verbally delimited keywords;

converting said verbally delimited keywords into search queries;

dynamically accessing a database which includes the audio clips based on the search queries, and wherein the database includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating the location in the electronic information at which the author inserted each audio clip and time data indicating the time of recording of each audio clip during a session so that one audio clip is displayed in synchronism with another audio clip and recording all document navigations indexed by time so that both the audio clip recorded during the session and a sequence of document navigations can be played back simultaneously.

78. (Canceled)

79. (Original): The process according to claim 77, wherein locating said audio notes includes the step of searching a table.

80. (Original): The process according to claim 77, wherein locating said audio notes includes the step of searching a linked list.

81. (Cancelled)

82. (Original): The process according to claim 77, further comprising the step of: playing said audio notes.

83. (Currently Amended): A process for playing audio notes in the form of audio clips inserted into an electronic information by an author, the electronic information comprising a plurality of pages, the process comprising the steps of:

displaying a first page of electronic information;

receiving verbally delimited keywords;

converting said verbally delimited keywords into search queries;

dynamically accessing a database which includes the audio clips based on the search queries, wherein the database includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating the location in the electronic information at which the author inserted each audio clip and time data indicating the time of recording of each audio clip during a session so that one audio clip is displayed in synchronism with another audio clip;

recording all page navigations indexed by time so that both the audio clip recorded during the session and a sequence of page navigations can be played back simultaneously;

playing audio notes associated with said first page;

displaying a second page of electronic information; and,

playing audio notes associated with said second page,

wherein each audio note is associated with a property identifying an the author of said audio note.

84. (Original): The process according to claim 83, further comprising the step of receiving user input,

wherein, in response to said user input, said second page is displayed.

85. (Currently Amended): A process of recording audio notes in the form of audio clips inserted into an electronic information by an author, the electronic information comprising a plurality of pages, the process comprising the steps of:

displaying a first page of electronic information;

recording a first set of audio notes;

receiving verbally delimited keywords;

converting said verbally delimited keywords into search queries;

dynamically accessing a database which includes the audio clips based on the search queries, wherein the database includes properties that permit audio information to be associated with a visual, wherein the properties include position data indicating the location in the electronic information at which the author inserted each audio clip and time data indicating the time of recording of each audio clip during a session so that one audio clip is displayed in synchronism with another audio clip;

recording all page navigations indexed by time so that both the audio clip recorded during the session and a sequence of page navigations can be played back simultaneously;

associating said first set of audio notes with said first page;

displaying a second page of electronic information;

recording a second set of audio notes; and

associating said second set of audio notes with said second page,

wherein each set of audio notes is associated with a property identifying an author of said set of audio notes.

86. (Original): The process according to claim 85, further comprising the step of receiving user input,

wherein, in response to said user input, said second page is displayed.

87.-88. (Canceled)